

SEQUENCE LISTING

<110> Cobb, Melanie

<120> TAO PROTEIN KINASE POLYPEPTIDES AND METHODS OF USE THEREOF

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<170> PatentIn version 3.0

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 Pro Val Pro Glu Glu Glu Glu Glu Glu Glu Glu Gly Gly Ala Pro
 900 905 910
 Ile Gly Thr Pro Arg Asp Pro Gly Asp Gly Cys Pro Ser Pro Asp Ile
 915 920 925
 Pro Pro Glu Pro Pro Pro Ser His Leu Arg Gln Tyr Pro Ala Ser Gln

930 935 940
 Leu Pro Gly Phe Leu Ser His Gly Leu Leu Thr Gly Leu Ser Phe Ala
 945 950 955 960
 Val Gly Ser Ser Ser Gly Leu Leu Pro Leu Leu Leu Leu Leu Leu
 965 970 975
 Pro Leu Leu Ala Pro Arg Trp Arg Trp Leu Ala Gly Ser Thr Ala Gly
 980 985 990

Pro

<210> 5

<211> 414

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> n= a, t, g, or c

<400> 5

acgancacc agttggaagt tactccaaag aatgagcaca aaacaatott aaagacactg 60
 aaagatgago agacaagaaa acttgcatt tnggcagagc agtatgaaca gagtataaat 120
 gaaatgatgg cctctcange gttacggcta gatgaggtc aagaagcaga atgccaggcc 180
 ttgaggctac agctccagca ggaatggag ctgctcaag cctaccagag caaatcaag 240
 atgcaaacag aggcacaaca tgaacgtgag ctccagaagc tagagcagag agtgtctctg 300
 cgcagagcac accttgagca gaagattgaa gaggagctgg ctgcoottca gaaggaacgc 360
 agcgagagaa taaagaacct attggaagg caagagcgag agattggaaa cttt 414

<210> 6

<211> 314

<212> DNA

<213> Homo sapiens

<400> 6
gaacaaagtc atgacctaat agttctgctg atgttggcct ttcttgaggt atttctctgca 60
agcagtaatc aacaaatctc ctaaaggagt ctgtccattc attagactgt aacgttgggg 120
agtcattctg ggcaatgtga tataaggcac toattgcatt catgttgaaa aggggcggct 180
tcogttccgc caattcaata caagtgatgc caagtgacca aatataact ttcccatcat 240
actgtctctc atccatagct aagatcacct ctggagccat ccagtaagggt gtgcccacga 300
aggagttggc cagg 314

<210> 7
<211> 370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<223> n= a, t, g, or c

<400> 7
accaaattcc caaatcccat tctgaggctc tccatgtcaa aagtttcaat ctctcgctct 60
tgactttcca ataggttctt tattctctcg ctgcgttctt tctgaagggc agccagctcc 120
tcttcaatct tctgctcaag gtgtggtctg cgcagagaca ctctctgctc tagcttctgg 180
agctcacgtt catgttctgc ctctgttngn atcttgattt ggtcttggtg ggcgttgagc 240
agctccattt cctgtctggag ctgtagcttc aaggcctggc attctgcttc ttgagctcca 300
tctagccgta acgcttgaga ggccatcatt tcatttatac tctgttcata ctgctctgcc 360
aaaatggcaa 370

<210> 8
<211> 190
<212> DNA
<213> Homo sapiens

<400> 8
 caacagcaga aaaacttaaa ggccatggaa atgcaaatta aaaaacagtt tcaggacact 60
 tgcaagtagc agaccaaaaca gtataaagca ctcaagaatc accagttgga agttactcca 120
 aagaatgagc acaaaacaat cttaaagaca ctgaaagatg agcagacaag aaaacttgcc 180
 attttggcag 190

<210> 9
 <211> 65
 <212> DNA
 <213> Homo sapiens

<400> 9
 gagcagtatg aacagagtat aaatgaaatg atggcctctc aagcgttacg gctagatgag 60
 gctca 65

<210> 10
 <211> 219
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <223> n=a, t, g, or c

<400> 10
 acgagtcgcc cagagagcta gagtacaggc agctgcacac gttacagaag ctacgcatgg 60
 atctgatcog ttacagcac cagacgggac tggaaaacca gctggagtac aataagagggc 120
 gagaagaga actgcacaga aagcatgtca tggaaacttcg gcaacagcca aaaaacttaa 180
 aggccatgga antgcaattt aaaaaacagt tccaggaaa 219

<210> 11
 <211> 85

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<223> n=a, t, g, or c

<400> 11

gtgcatatgg tatatttnat tcatttttgc aaagcgttct gttttgtgtt tactaattgg 60

gatgtcatag tacttggtcg ccggg 85

<210> 12

<211> 46

<212> DNA

<213> Homo sapiens

<400> 12

ctcacttggt tactacagtg tggaagctga gtgcatatgg tatatt 46

<210> 13

<211> 116

<212> DNA

<213> Homo sapiens

<400> 13

gatatttggc cattgggtat caagtgata gagctggccg aacgtcgtcc accattgttc 60

agtatgaatg caatgtctgc cctctaccat attgctcaaa atgacctcc aactct 116

<210> 14

<211> 118

<212> DNA

<213> Homo sapiens

<400> 14
 ctgaaaggcc tggattatct gcactcagag cgcaagatcc accgagatat caaagctgcc 60
 aacgtgctgc tctcggagca gggatgatgt aagatggcag acttcgggtg ggctggca 110

<210> 15
 <211> 110
 <212> DNA
 <213> Homo sapiens

<400> 15
 gaccacagagg aactcttcac caagcttgac cgcattggca aaggttcatt tggggagggtg 60
 tacaagggga tgcacaacca caccaaggaa gtggtggcca tcaagatcat 110

<210> 16
 <211> 134
 <212> DNA
 <213> Homo sapiens

<400> 16
 toaggattct ggagctctgg agttccatta gtggctatca gatacaatgc cctgagtggg 60
 ttttcattaa ggtaaggggg ttcaccttcc accatttcaa ttgccataat tccaagagac 120
 cagatatcaa cttt 134

<210> 17
 <211> 270
 <212> PRT
 <213> Saccharomyces cerevisiae

<400> 17
 Met Ala Pro Ala Val Leu Gln Lys Pro Gly Val Ile Lys Asp Pro Ser
 1 5 10 15
 Ile Ala Ala Leu Phe Ser Asn Lys Asp Pro Glu Gln Asp Leu Arg Glu
 20 25 30

Ile Gly His Gly Ser Phe Gly Ala Val Tyr Phe Ala Tyr Asp Lys Lys
 35 40 45
 Asn Glu Gln Thr Val Ala Ile Lys Lys Met Asn Phe Ser Gly Lys Gln
 50 55 60
 Ala Val Glu Lys Trp Asn Asp Ile Leu Lys Glu Val Ser Phe Leu Asn
 65 70 75 80
 Thr Val Val His Pro His Ile Val Asp Tyr Lys Ala Cys Phe Leu Lys
 85 90 95
 Asp Thr Thr Cys Trp Leu Val Met Glu Tyr Cys Ile Gly Ser Ala Ala
 100 105 110
 Asp Ile Val Asp Val Leu Arg Lys Gly Met Arg Glu Val Glu Ile Ala
 115 120 125
 Ala Ile Cys Ser Gln Thr Leu Asp Ala Leu Arg Tyr Leu His Ser Leu
 130 135 140
 Lys Arg Ile His Arg Asp Ile Lys Ala Gly Asn Ile Leu Leu Ser Asp
 145 150 155 160
 His Ala Ile Val Lys Leu Ala Asp Phe Gly Ser Ala Ser Leu Val Asp
 165 170 175
 Pro Ala Gln Thr Phe Ile Gly Thr Pro Phe Phe Met Ala Pro Glu Val
 180 185 190
 Ile Leu Ala Met Asp Glu Gly His Tyr Thr Asp Arg Ala Asp Ile Trp
 195 200 205
 Ser Leu Gly Ile Thr Cys Ile Glu Leu Ala Glu Arg Arg Pro Pro Leu
 210 215 220
 Phe Ser Met Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn Asp
 225 230 235 240
 Pro Pro Thr Leu Ser Pro Ile Asp Thr Ser Glu Gln Pro Glu Trp Ser
 245 250 255
 Leu Glu Phe Val Gln Phe Ile Asp Lys Cys Leu Arg Lys Pro Ala Glu
 260 265 270
 Glu Arg Met Ser Ala Glu
 275

<210> 18

<211> 273

<212> PRT

<213> C. elegans

<400> 18

Arg Glu Glu Arg Glu Arg Arg Lys Lys Gln Leu Tyr Ala Lys Leu Asn
 1 5 10 15
 Glu Ile Cys Ser Asp Gly Asp Pro Ser Thr Lys Tyr Ala Asn Leu Val
 20 25 30
 Lys Ile Gly Gln Gly Ala Ser Gly Gly Val Tyr Thr Ala Tyr Glu Ile
 35 40 45
 Gly Thr Asn Val Ser Val Ala Ile Lys Gln Met Asn Leu Glu Lys Gln
 50 55 60
 Pro Lys Lys Glu Leu Ile Ile Asn Glu Ile Leu Val Met Lys Gly Ser
 65 70 75 80
 Lys His Pro Asn Ile Val Asn Phe Ile Asp Ser Tyr Val Leu Lys Gly
 85 90 95
 Asp Leu Trp Val Ile Met Glu Tyr Met Glu Gly Gly Ser Leu Thr Val
 100 105 110
 Asp Val Val Thr His Cys Ile Leu Thr Glu Gly Gln Ile Gly Ala Val
 115 120 125
 Cys Arg Glu Thr Leu Ser Gly Leu Glu Phe Leu His Ser Lys Gly Val
 130 135 140
 Leu His Arg Asp Ile Lys Ser Asp Asn Ile Leu Leu Ser Met Glu Gly
 145 150 155 160
 Asp Ile Lys Leu Thr Asp Phe Gly Phe Cys Ala Gln Ile Asn Glu Leu
 165 170 175
 Asn Leu Lys Arg Thr Thr Met Val Gly Thr Pro Tyr Trp Met Ala Pro
 180 185 190
 Glu Val Val Ser Arg Lys Glu Tyr Gly Pro Lys Val Asp Ile Trp Ser
 195 200 205
 Leu Gly Ile Met Ile Ile Glu Met Ile Glu Gly Glu Pro Pro Tyr Leu
 210 215 220
 Asn Glu Thr Pro Leu Arg Ala Leu Tyr Leu Ile Ala Thr Asn Gly Thr
 225 230 235 240
 Pro Lys Leu Lys Glu Pro Glu Asn Leu Ser Ser Ser Leu Lys Lys Phe
 245 250 255
 Leu Asp Trp Cys Leu Cys Cys Val Glu Pro Glu Asp Arg Ala Ser Ala
 260 265 270
 Thr

<210> 19

<211> 33

<212> DNA

<213> Artificial

<220>

<223> modified base }

<220>

<221> misc_feature

<223> N= inosine

<400> 19

gacgctggat ccaaagatac tggncagggg ngc

33

<210> 20

<211> 21

<212> DNA

<213> Artificial

<220>

<223> modified base

<220>

<221> misc_feature

<223> n= inosineI

<400> 20

ggngtncag ttngtngcna t

21

<210> 21

<211> 28

<212> DNA

<213> Artificial

<220>

<223> modified base

<220>

<221> misc_feature

<223> n=inosineI

<400> 21

aaaggaagca nagnacagaa oggaagat

28

<210> 22

<211> 30

<212> DNA

<213> Artificial

<220>

<223> modified base

<220>

<221> misc_feature

<223> n=inosineI

<400> 22

gaagctgaat tcacctteng gngccatcca

30

<210> 23

<211> 20

<212> PRT

<213> Rattus norvegicus

<400> 23

Thr	Lys	Asp	Ala	Val	Arg	Glu	Leu	Asp	Asn	Leu	Gln	Tyr	Arg	Lys	Met
1				5					10					15	

Lys Lys Leu Leu
20

<210> 24

<211> 19

<212> PRT

<213> Rattus norvegicus

<400> 24

Lys Lys Glu Leu Asn Ser Phe Leu Glu Ser Gln Lys Arg Glu Tyr Lys
1 5 10 15

Leu Arg Lys

<210> 25

<211> 20

<212> PRT

<213> Rattus norvegicus

<400> 25

Arg Glu Leu Arg Glu Leu Gln Arg Val Ser Leu Arg Arg Ala Leu
1 5 10 15

Leu Glu Gln Lys
20

<210> 26

<211> 8

<212> PRT

<213> Rattus norvegicus

<400> 26

His Arg Asp Ile Lys Ala Gly Asn
1 5